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ABSTRACT

Originally developed for the Department of Defense Schools (DoDDS) system, this learning package on using skills and strategies for effective learning is designed for teachers who wish to upgrade or expand their teaching skills on their own. The package includes a comprehensive search of the ERIC database; a lecture giving an overview on the topic; the full text of several papers on the topic; copies of any existing ERIC/RCS publications on the topic; a set of guidelines for completing a goal statement, a reaction paper, and an application project; and an evaluation form. (MG)

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Learning Package #9

Using Skills and Strategies for Effective Learning

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OVERVIEW

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Using Skills and Strategies for Effective Learning

by Zhang Hong

(Lecture)

(All references are fully documented in enclosed bibliography, or on reference list attached to this lecture)

In the field of education, "skills" and "strategies" have been popular topics for more than forty years. Ever since Robinson publicized the technique of SQ3R in 1941, reports on learning skills and strategies have been proliferating. Especially in more recent years, due to developments in the area of cognitive psychology, learning skills/strategies have attracted ever increasing attention from both education researchers and classroom teachers. In this lecture, we will discuss the use of skills and strategies for the purpose of effective learning. First, we will deal with definitions of the two words "skill" and "strategy." Second, we will discuss how skills, strategies, and knowledge interrelate. Finally, we will address the issue of strategy instruction in the classroom.

Definition and Concepts

Both "skill" and "strategy" are used frequently, but analyzed little, in educational discourse. Few studies have attempted to define the two concepts and to differentiate between them. Without such groundwork, it is difficult to give children effective instruction in skill and strategy usage.

The article in this package by Duffy and Roehler (1987) is one of the few that has endeavored to define the two concepts. According to Duffy and Roehler:

> Strategies are plans readers use flexibly and adaptively, depending upon the situation. Skills, in contrast, are procedures readers overlearn through repetition so that speed and accuracy are assured every time the response is called for.

Given these definitions, we can see that the two concepts are quite different indeed. If strategies are plans, then high order thinking ability is necessary for their use. When we plan for a task, as we know from experience, we need to take several things into consideration -- the goal of our task, the context or situation in which our task is to be performed, and the method that will be used to carry out the task. Furthermore, we frequently will have more than one alternative available to us in the course of any actual planning. Therefore, we must evaluate these alternatives and choose from among them as we develop our plan.

With skills or procedures, however, which can be learned through repetitive practice, application is not so much a high order thinking process as a mechanical response to some external stimuli. Skills are much easier to learn and to use than are strategies. However, skills are essential to the functioning of strategies, for the latter will not be possible without mastery of a host of skills. Such an interpretation is supported by Duffy and

Roehler's discussion of how teaching skills differs from teaching strategies:

> In teaching skills, the object is to create automatized accuracy through drill and practice activities (such as worksheets) which call repeatedly for the same response. Students who receive skills instruction learn to answer isolated exercises quickly and accurately.
>
> In teaching strategies, on the other hand, the object is to develop thoughtful and conscious reasoning about problems encountered in real text (such as trade books or magazines) where each situation demands a slightly different response. Students who receive strategy instruction learn to reason adaptively with their knowledge about how reading works.

The goal of skill instruction is "automaticity" in response and performance. Skills can be learned through repetition, isolated from context. Learning strategies, however, requires thoughtfulness, planning, flexibility, and the monitoring of skills used in performing a certain task. Strategies are difficult to teach, and even more difficult to learn. Skills can be learned through training, but strategies require an education.

Skills, Strategies, and Knowledge

To take further our discussion of the differences between skills and strategies, let's now consider the different types of knowledge represented by the two terms. Researchers in cognitive sciences tend to agree that three types of knowledge are essential for human cognitive development. They are declarative knowledge, procedural knowledge, and conditional knowledge (Paris, Lipson, and Wixson, 1983). Declarative knowledge is

factual knowing; it is often defined by researchers as "knowing that." Procedural knowledge includes "information about the various actions that must be performed in a task. It is knowing how" (Marzano, et.al. 1988, p.14). Procedural knowledge "describes a large range of actions involved in any task such as reading. They are the repertoire of behavior available to an agent who selects among them to attain different goals" (Paris, Lipson and Wixson, 1983, p.303). Conditional knowledge refers to the knowing that will help one to make a decision based on the two previous types of knowledge; it is knowing when, where, and why. For instance, in the course of learning or problem solving, it is knowing when to use one and not the other strategy. Additionally, however, it is being able to explain the reasons why that one strategy was chosen.

Comparing our definitions for skills and strategies with our definitions for the three types of knowledge, we find that skills fall easily into the category of procedural knowledge, knowing how, while strategies fit best under the rubric of conditional knowledge, knowing when and why. Strategies involve regulating and monitoring one's own cognitive or learning performance. Therefore, strategies are higher order thinking and planning skills that can enable the functioning of other skills or subskills. For this reason, we can also call strategies "enabling skills." Based on such an understanding, the relationship of skill instruction to

strategy instruction becomes obvious; without skill competence, it would not be possible for us to use strategies.

Skill and Strategy Instruction

In order to teach strategy, the teacher must first of all be aware of his or her own use of strategies. The teacher should be metacognitive in orientation, and creative in his or her approach to instruction. Based on his or her understanding of students' abilities, the teacher must be able to envision an instructional program that will encourage students to construct their own learning strategies.

Second, strategy instruction should be highly process oriented. This does not mean, however, that the subjects being studied must become secondary to the process. A good strategy instruction program will use content for the effective teaching of relevant strategies. The teacher should regard each subject as a conceptual framework that will guide him or her through specific skill training, while keeping the goal of strategy instruction in mind at all times.

Third, success in strategy instruction requires good communication between teacher and student, and cooperation among teachers. Dialogues between teacher and student increase mutual understanding and better enable the teacher to design and implement effective strategy instruction. Communication among teachers is just as important as dialogue between teacher and

student. As teachers, what we want most for our students is that they become independent learners by the time they leave our schools. To make this happen, cooperation among teachers is essential. When teachers work together, students have opportunities to apply the skills and strategies learned in one class to assignments given in others. Ultimately, this will help them transfer these skills and strategies from classroom to everyday life.

In their studies of reading comprehension strategies with learning disabled children, Paris and Oka (1989) summarize six guidelines which they call "critical features" of strategy instruction:

1. Effective reading instruction focuses on process as well as content.
2. Strategies need to be explained sensibly and explicitly.
3. Students need to attribute successful comprehension to appropriate strategies.
4. Dialogue about thinking promotes self-regulated learning.
5. Effective instruction maximizes task involvement, intrinsic motivation, and cooperation.
6. Effective instruction promotes transfer of strategies to content areas.

Although their studies were based on learning disabled subjects, the "critical features" outlined by Paris and Oka are applicable to other classroom settings as well.

Conclusion

Pressley et. al. (1989) outlined five characteristics of the good strategy user:

1. Possessing a host of skills to accomplish a tasks
2. Integrating specific strategy into higher order sequences that accomplish complex cognitive task
3. Relying on metacognitive factors to regulate competent performance
4. Having an appropriate belief about the pay-off of the strategy used
5. Possessing an adequate knowledge base

Through the conscious use of strategies, students eventually develop a habit of mind that will help them to confront and accept challenges in both study and life. Students who consciously cultivate and use strategies are focused upon and engaged in the process of learning. Thus, they learn to appreciate education for its own sake.

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Increasing Comprehension by Activating Prior Knowledge

by William L. Christen and Thomas J. Murphy

The Research

Research has been conducted to determine the value of providing activities or strategies to assist in providing students with ways to activate their prior knowledge base. Studies looked at three possibilities: (1) building readers' background knowledge; (2) activating readers' existing background knowledge and attention focusing *before* reading; and (3) guiding readers *during* reading and providing review *after* reading.

It appears that when readers lack the prior knowledge necessary to read, three major instructional interventions need to be considered: (1) teach vocabulary as a prereading step; (2) provide experiences; and (3) introduce a conceptual framework that will enable students to build appropriate background for themselves.

Preteaching vocabulary (to increase learning from text materials) probably requires that the words to be taught must be key words in the target passages (Beck, *et al*, 1982; Kameenui, Carnine, *et al*, 1982), that words be taught in semantically and topically related sets so that word meaning and background knowledge improve concurrently (Beck et al., 1982; Stevens, 1982), and that only a few words be taught per lesson and per week (Beck et al., 1982; Kameenui et al., 1982; Stevens, 1982). To be an effective strategy, an extensive and long-term vocabulary strand accompanying a parallel schematic or background-knowledge-development strand is probably called for.

Research on *enriching background knowledge* has demonstrated that activating such knowledge increases comprehension. Graves and his associates (1980; 1983) developed previews for short stories that had, as one component, the building of prior knowledge important to understanding the selection. Data indicated that reading the previews before reading the stories increased students' learning from stories by a significant and impressive amount. Stevens (1982) increased learning from text compared with a control group for 10th-grade students reading a history passage by teaching them relevant background information for that passage. Hayes and Tierney (1982) found that presenting background information related to the topic to be learned helped readers learn from texts regardless of how that background information was presented or how specific or general it was. Alvarez (1990) used case-based instruction to develop students' abilities to assemble and incorporate different knowledge sources in memory. He taught them how to employ thematic organizers and hierarchical concept mapping in their reading.

Additionally, scant attention is paid to the role of the reader's schemata, or background knowledge, when learning from text (Tierney & Pearson, 1985). Yet research clearly emphasizes that for learning to occur, new information must be integrated with what the learner already knows (Rumelhart, 1980).

It appears that providing students with strategies to activate their prior knowledge base or to build a base if one does not exist is supported by the current research. It is our contention that this is one way teachers can have a positive influence on comprehension in their classrooms.

For example, Reutzel and Morgan (1990) advocate two pedagogical alternatives for teachers who wish to improve students' comprehension of causal relations which often are implicit in content area textbooks. Teachers may rewrite the text to make the cohesion relations explicit (a daunting task), or they may assist students in building, modifying, or elaborating their background knowledge prior to reading expository texts. Miholic (1990) outlines the construction of a semantic map for textbooks which he recommends for use at adult, secondary, and college level. For a class of gifted seventh grade students, Davis and Winek (1989) developed a project for building background knowledge so that the students could generate topics for writing articles in history. The teachers devoted one class period a week for eight weeks to various group activities to build background knowledge, culminating in prewriting activities focused on brainstorming for the eighth week. The articles were then written by the students at home.

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Classroom Implications

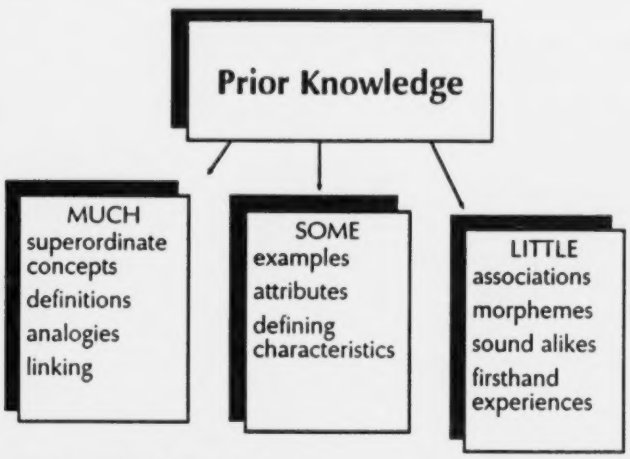
Engaging students in prior knowledge experiences becomes a form in classrooms where teachers value understanding what knowledge students possess. We know that prior knowledge is an important step in the learning process. It is a major factor in comprehension: that is, making sense of our learning experiences. Brain-based research confirms the fact that the learning environment needs to provide a setting that incorporates stability and familiarity. It should be able to satisfy the mind's enormous curiosity and hunger for discovery, challenge, and novelty. Creating an opportunity to challenge our students to call on their collective experiences (prior knowledge) is essential. Through this process we move students from memorizing information to meaningful learning and begin the journey of connecting learning events rather than remembering bits and pieces. Prior knowledge is an essential element in this quest for making meaning.

Level of Prior knowledge

Students generally fall into three categories: *much*, *some*, or *little* prior knowledge. In each instance, the teacher will make specific instructional decisions based on what is discovered in the prior knowledge part of the lesson. To check out what prior knowledge exists about a topic, idea, or concept, you may choose to do some of the following activities:

- *Brainstorm* the topic. Write all the information solicited from the students on the chalkboard, a piece of paper, or transparency.
- *Ask* specific and/or general questions about the topic. See what responses are given.
- *Pose a problem* or a *scenario*. Based on this description, find out what the students know about the idea presented.

Once the data is collected, a decision about the appropriate forms of instruction can be made. The following diagram can be helpful:



Teachers should remember to

(1) Present information which builds:

- **Background ideas**
- **Concepts**
- **Principles**

(2) Show, don't tell through—

- **Demonstrations**
- **Multi-media**
- **Graphics**

(3) Use outside resources, trips and speakers

(4) Tell about topic from your experience

(5) Use any combination of the above!

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ERIC® CLEARINGHOUSE ON READING AND COMMUNICATION SKILLS

November 1989 DIGEST

Schema Activation, Construction, and Application

by Marino C. Alvarez and Victoria J. Risko

Readers rely on their prior knowledge and world experience when trying to comprehend a text. It is this organized knowledge that is accessed during reading that is referred to as schema (plural schemata). Readers make use of their schema when they can relate what they already know about a topic to the facts and ideas appearing in a text. The richer the schema is for a given topic the better a reader will understand the topic.

Schema theorists have advanced our understanding of reading comprehension by describing how prior knowledge can enhance a reader's interaction with the text. Accordingly, comprehension occurs when a reader is able to use prior knowledge and experience to interpret an author's message (Bransford, 1985; Norris & Phillips, 1987). Educators and researchers have suggested numerous instructional strategies to help students activate and use prior knowledge to aid comprehension. Yet, schema theory does not explain how readers modify and create new schema when presented with novel information in texts.

Schema Activation:

Because texts are never completely explicit, the reader must rely on preexisting schemata to provide plausible interpretations. Yet, there is much evidence that good and poor readers do not always use schemata appropriately or are unaware of whether the information they are reading is consistent with their existing knowledge. Also, there is evidence that students who do not spontaneously use schemata as they read will engage them if given explicit instructions prior to reading (e.g., Bransford, 1979).

Prereading strategies have been developed to help students relate new information appearing in written discourse to their existing knowledge. The design of many of these preorganizers reflects Ausubel's (1959) definition of readiness and the purpose of their use is to create a mind set prior to reading. These preorganizers have included advance organizers (Ausubel, 1960), structured overviews or graphic organizers (Alvermann, 1981), previews (Graves, *et al.*, 1983), concept maps (Novak & Gowin, 1984), and thematic organizers (Alvarez, 1980, 1983; Alvarez & Risko, 1989; Risko & Alvarez, 1986).

Schema Construction and Application:

Learning novel concepts may require the reader to connect new information to a congruent mental model. Mental models represent an individual's construal of existing knowledge and/or new information in the domain even though this information may be fragmentary, inaccurate, or inconsistent (Gentner & Gentner, 1983). A person's mental model is a representation of a particular belief based on existing knowledge of a physical system or a semantic representation depicted in a text. For example, a person may hold a belief that balls are round, inflatable and are made to bounce. However, this person may encounter a football (an ellipsoid) that is kicked or thrown, or ball bearings that are solid, or a bowling ball that is solid and has holes drilled into it for the purpose of rolling rather than bouncing. This new knowledge is integrated into a new, more complex, mental structure about the shape, substance, form, and function of balls.

As Bransford (1985) points out, schema activation and schema construction are two different problems. While it is possible to activate existing schemata with a given topic, it does not necessarily follow that a learner can use this activated knowledge to develop new knowledge and skills. Problem solving lessons and activities can provide learners with situations that aid in schema construction which includes critical thinking. Critical thinking theory enables a reader to analyze an ambiguous text. When versed in this process, a reader can either weigh alternative interpretations, dismiss others, make a decision to evaluate multiple possibilities, or accept the information as being reasonable. This process helps students to modify or extend their mental model, or existing knowledge base, for target concepts.

Several teacher-directed and self-initiated activities can be used to promote schema construction and application of knowledge to novel situations. Four such strategies that are designed to foster shared meaning between and among teachers and peers are: cases, interactive videodiscs, hierarchical concept maps, and Vee diagrams.

Cases that present learners with single and varied contexts across disciplines provide learners with scenarios that can be discussed and analyzed from multiple perspectives (e.g., see Christensen, 1987; Spiro, *et al.*, 1987). These cases can include written documents, recorded (musical as well as narrative) interludes, paintings, artifacts, video portrayals, and other pertinent substances and materials. Another teacher-directed strategy is the use of interactive videodiscs. Bransford and his colleagues are developing episodes, revolving around problem-oriented learning environments, that can be computer-accessed by learners to invite critical thinking and schema construction (see Bransford, *et al.*, 1989; Bransford, *et al.*, in press).

Hierarchical concept maps and Vee diagrams are two methods that students can initiate on their own for schema construction and application. Hierarchical concept maps (Novak & Gowin, 1984) are designed to help the reader clarify ambiguities of a text while simultaneously revealing any misconceptions that result from a reading. More importantly they provide the learner with a tool from which

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to initiate ideas that can be shared by visual inspection with someone else. The Vee diagram (Gowin, 1981/1987) is a method by which a learner can learn about the structure of knowledge and knowledge-making within a given discipline and use this knowledge in novel contexts.

Students can be taught to incorporate new information into their existing world knowledge. This can be accomplished through teacher guided instruction and self-initiated strategies that includes methods and meaningful materials that induce critical thinking with conceptual problems. In order for schema construction to occur, a framework needs to be provided that helps readers to elaborate upon new facts and ideas and to clarify their significance or relevance. Students need to learn more about themselves as learners. Notable in this learning context is the relationship between facts and ideas learned in formal school settings and those encountered in everyday learning environments. Perhaps within this inquiry we will be led to discover the ways individuals choose to relate new information to existing schemata and how this new information influences their future knowledge and decision-making.

Additional material on schemata can be found in the ERIC database. Some recent articles are:

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ERIC CLEARINGHOUSE ON READING AND COMMUNICATION SKILLS

June 1989 DIGEST

Critical Thinking: Promoting It in the Classroom

by M. Carrol Tama

The NCTE Committee on Critical Thinking and the Language Arts defines critical thinking as "a process which stresses an attitude of suspended judgment, incorporates logical inquiry and problem solving, and leads to an evaluative decision or action." In a new monograph copublished by the ERIC Clearinghouse on Reading and Communication Skills, Siegel and Carey (1989) emphasize the roles of signs, reflection, and skepticism in this process.

Ennis (1987) suggests that "critical thinking is reasonable, reflective thinking that is focused on deciding what to believe or do." However defined, critical thinking refers to a way of reasoning that demands adequate support for one's beliefs and an unwillingness to be persuaded unless the support is forthcoming.

Why should we be concerned about critical thinking in our classrooms? Obviously, we want to educate citizens whose decisions and choices will be based on careful, critical thinking. Maintaining the right of free choice itself may depend on the ability to think clearly. Yet, we have been bombarded with a series of national reports which claim that "Johnny can't think" (Mullis, 1983; Gardner, 1983; *Action for Excellence*, 1983). All of them call for schools to guide students in developing the higher level thinking skills necessary for an informed society.

Skills needed to begin to think about issues and problems do not suddenly appear in our students (Tama, 1986; 1989). Teachers who have attempted to incorporate higher level questioning in their discussions or have administered test items demanding some thought rather than just recall from their students are usually dismayed at the preliminary results. Unless the students have been prepared for the change in expectations, both the students and the teacher are likely to experience frustration.

What is needed to cultivate these skills in the classroom? A number of researchers claim that the classroom must nurture an environment providing modeling, rehearsal, and coaching, for students and teachers alike, to develop a capacity for informed judgments (Brown, 1984; Hayes and Alvermann, 1986).

Teacher Change

Hayes and Alvermann found that coaching teachers led to significant changes in students' discussion, including more critical analysis. The supervision model that was used allowed teachers and researchers to meet for preobservation conferences in order to set the purpose for the observation. Then, each teacher's lessons were videotaped and observers made field notes to supplement the videotape. After the lesson, the researchers met to analyze the tape and notes and to develop strategies for coaching the teachers. In another post-observation meeting, the teachers and supervisors planned future lessons incorporating the changes they felt necessary to promote and improve critical discussion in the classes.

Hayes and Alvermann report that this coaching led teachers to acknowledge students' remarks more frequently and to respond to the students more elaborately. It significantly increased the proportion of text-connected talk students used as support for their ideas and/or as cited sources of their information. In addition, students' talk became more inferential and analytical.

A summary of the literature on the role of "wait time," (the time a teacher allows for a student to respond as well as the time an instructor waits after a student replies) found that it had an impact on students' thinking (Tobin, 1987). In this review of studies, Tobin found that those teachers who allowed a 3-5 second pause between the question and response permitted students to produce cognitively complex discourse. Teachers who consciously managed the duration of pauses after their questioning and provided regular intervals of silence during explanation created an environment where thinking was expected and practiced.

However, Tobin concludes that "wait time" in and of itself does not insure critical thinking. A curriculum which provides students with the opportunity to develop thinking skills must be in place. Interestingly, Tobin found that high achievers consistently were permitted more wait time than were less skilled students, indicating that teachers need to monitor and evaluate their own behavior while using such strategies.

Finally, teachers need to become more tolerant of "conflict," or confrontation, in the classroom. They need to raise issues which create dissonance and refrain from expressing their own bias, letting the students debate and resolve problems. Although content area classroom which encourages critical thinking can promote a kind of some psychological discomfort in some students as conflicting accounts of information and ideas are argued and debated, such feelings may motivate them to resolve an issue (Festinger, 1957). They need to get a feel for the debate and the conflict it involves. Isn't there ample everyday evidence of this: Donahue, Geraldo Rivera, *USA Today*?

Authors like Frager (1984) and Johnson and Johnson (1979) claim that to really engage in critical thinking, students must encounter the dissonance of conflicting ideas. Dissonance, as discussed by Festinger, 1957 promotes a psychological discomfort which occurs in the presence of an inconsistency and motivates students to resolve the issue.

To help students develop skills in resolving this dissonance, Frager (1984) offers a model for conducting critical thinking classes and provides samples of popular issues that

promote it: for example, banning smoking in public places, the bias infused in some sports accounts, and historical incidents written from both American and Russian perspectives.

If teachers feel that their concept of thinking is instructionally useful, if they develop the materials necessary for promoting this thinking, and if they practice the procedures necessary, then the use of critical thinking activities in the classroom will produce positive results.

Matthew Lipman (1988) writes, "The improvement of student thinking—from ordinary thinking to good thinking—depends heavily upon students' ability to identify and cite good reasons for their opinions."

Training students to do critical thinking is not an easy task. Teaching which involves higher level cognitive processes, comprehension, inference, and decision making often proves problematic for students. Such instruction is often associated with delays in the progress of a lesson, with low success and completion rates, and even with direct negotiations by students to alter the demands of work (Doyle, 1985). This negotiation by students is understandable. They have made a career of passive learning. When met by instructional situations in which they may have to use some mental energies, some students resist that intellectual effort. What emerges is what Sizer (1984) calls "conspiracy for the least," an agreement by the teacher and students to do just enough to get by.

Despite the difficulties, many teachers are now promoting critical thinking in the classroom. They are nurturing this change from ordinary thinking to good thinking admirably. They are 1) promoting critical thinking by infusing instruction with opportunities for their students to read widely, to write, and to discuss; 2) frequently using course tasks and assignments to focus on an issue, question, or problem; and 3) promoting metacognitive attention to thinking so that students develop a growing awareness of the relationship of thinking to reading, writing, speaking, and listening. (See Tama, 1989.)

Another new ERIC/RCS and NCTE monograph (Neilsen, 1989) echoes similar advice, urging teachers to allow learners to be actively involved in the learning process, to provide consequential contexts for learning, to arrange a supportive learning environment that respects student opinions while giving enough direction to ensure their relevance to a topic, and to provide ample opportunities for learners to collaborate.

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ERIC Clearinghouse on Reading and Communication Skills

ERIC DIGEST

Metacomprehension

Teachers make many instructional decisions based on their assessments of student comprehension. "Excellent" students, for example, are often given enrichment materials, so that they won't be bored while the teacher works with other students; "poor" students, on the other hand, are often given remedial materials to help them "catch up." Almost always, such decisions are based on what a student knows or doesn't know relative to the teacher's questions. Although assessment of a student's comprehension is necessary and important, it is not always sufficient. There is another dimension that teachers might consider: the student's metacomprehension, or awareness of his or her own understanding.

What is Metacomprehension?

Who of us has not had the experience of reading a book and becoming aware that we have not understood the content of the last few pages? At the point of that awareness, our metacomprehension was very high—we *knew* we hadn't processed anything we'd just read. On the other hand, while we were reading absentmindedly, our metacomprehension was very low—we had been unaware of our own level of understanding. Metacomprehension, then, is the awareness of and conscious control over one's own understanding or lack of it.

Regardless of whether or not students are "doing well" (by whatever grading scheme we use), they may or may not be aware of their own degree of understanding. Students with high metacomprehension are either those who know they understand when, in fact, they do, or those who know they do not understand when, in fact, they do not. Their awareness of their understanding accurately reflects their comprehension.

Students have inaccurate or low metacomprehension if they are uncertain, or if they are unaware, that they do or do not understand. Poor metacomprehension may be exhibited in different ways: there are students who are sure they just "blew" tests on which they subsequently get top scores, students who believe that they have the material "down pat" and perform poorly, and students who just haven't thought about their own state of understanding. When we put these comprehension/metacomprehension dimensions together, we can divide our students into four groups.

Comprehension: high	Comprehension: low	Metacomprehension
1 know and are aware that they know	2 do not know and realize they do not know	high
3 know but think they don't know	4 do not know but think they do know	low

From *Computers in the English Classroom: A Primer for Teachers.* Sally N. Standiford, Kathleen Jaycox, and Anne Auten. Urbana, Ill.: ERIC Clearinghouse on Reading and Communication Skills and National Council of Teachers of English, 1983, 17. ED 228 654.

Why Is Metacomprehension Important?

One of the primary goals of instruction is to help students become efficient and effective learners—to have them become responsible for their own learning. Effective learning requires awareness of one's understanding or lack of it, as well as knowing what to do when one fails to understand. Baker and Brown (ED 195 932) have identified three main reasons for comprehension failures: (1) the learner does not have enough information about the topic to interpret the message (written or oral); (2) the learner has the appropriate schemata, or prior knowledge, but there aren't enough clues in the message to suggest them to the learner; or (3) the learner interprets the message consistently, but the interpretation is different from the one intended by the author or speaker. It is very unlikely that students in the third group will take remedial action, since they won't realize that their comprehension has failed. Students who fail to construct consistent interpretations are more likely to attempt activities to clarify their understanding. "Such self-awareness is a prerequisite for self-regulation, the ability to orchestrate, monitor, and check one's own cognitive activities," according to Brown, Campione, and Day (ED 203 297, 26).

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What Can English/Language Arts Teachers Do?

Asserting that sophisticated reading is a complex, acquired skill, Stewart and Tei (37) state that readers need to learn how to engage in certain activities to achieve the goals of reading. One such goal, for example, is reading to study. This may involve skills such as recognizing and retaining main points, rereading important sections, making adjustments in reading rate, and self-testing to monitor the success of various strategic activities. Awareness of the understanding and use of these skills is necessary to metacomprehension.

Schallert and Kleiman (ED 172 189) have identified some strategies reading teachers can use to help students' metacomprehension: (1) focusing the student's attention on the main ideas; (2) asking students questions about their understanding to help them monitor their comprehension; and (3) relating the student's relevant prior knowledge to the new information. As teachers we need to teach students how to use such activities and encourage their independent use.

For students with low comprehension-high metacomprehension (Cell 2 of grid), teacher questions and feedback designed to help students apply appropriate studying strategies and techniques can be effective. These students do not gain from those teacher responses that simply indicate that they are wrong—they already know that. As teachers better understand these strategies and techniques, they can train students to use them more effectively. For example, instructing students to summarize a reading without giving them any criteria for development of a summary does a disservice to those students who are aware that they don't know how to construct such a summary.

Students with high comprehension-low metacomprehension (Cell 3) need consistent, positive reinforcement, both verbal and written. Although some research has demonstrated that the positive reinforcement of confirming correctness for some students is ineffective, regular positive reinforcement is effective for this subset of students, since their lack of confidence is critical.

The approach for students with low comprehension-low metacomprehension (Cell 4) should be to focus on the metacomprehension dimension first, breaking through their false sense of understanding rather than teaching them content. One might ask these students questions that help them recognize a contradiction between what they really know and what they *think* they know, but don't. For example, a student who draws an illogical inference from a reading passage due to incomplete background knowledge may be unconvinced if simply told that he or she is wrong. Such a student could be confronted with his or her misunderstanding by being shown similarities and/or differences between the passage in question and analogous material more familiar to the student.

How Can Teachers Evaluate Student Metacomprehension?

One of the simplest ways to assess a student's awareness of understanding is to ask the student to rate the certainty that he or she has answered correctly or incorrectly. Students with good metacomprehension will respond that they are relatively certain that their correct answers are correct or that their incorrect answers are incorrect. Poor metacomprehenders will have a mismatch between their answers and their confidence ratings. A word of caution: younger students frequently respond positively when questioned on how sure they are of what they know, regardless of the truth of their assertions (Baker and Brown 1980). More direct evidence of metacomprehension for these students might come from monitoring the self-correction of their errors during such learning activities as reading.

"The ability to reflect on one's own activities . . . is a late developing skill with important implications. . . . If . . . the child is not aware of his own limitations as a learner or the complexity of the task at hand, then he can hardly be expected to take preventive actions in order to anticipate or recover from problems" (Baker and Brown ED 195 932, 3). It is not enough for a teacher to be aware of the dimension of comprehension awareness. Development of the student's own awareness is crucial. To better serve their students, English language arts teachers should regularly and actively integrate metacomprehension strategies in their classrooms.

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Sources for Further Reading

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Task #1

Goal Statement

Your Name:_____

Course #:_____

Learning package:_____

The purpose of writing a goal statement is to create an expectation for yourself, to establish a purpose that you can check when you have finished reviewing the package of materials. It should be used in conjunction with your reaction statement--the commentary that you will make after working your way through the materials in the learning package.

Directions: This is a pre-reading activity. Think about the topic of this package and then look at the various materials, primarily reviewing their headlines and subheads. What does that review prompt you to want to discover through this package?

Write a goal statement of no more than one paragraph that includes the questions that you want answered or the kinds of applications that you hope the package will help you accomplish in your work. Attached please find examples of representative goal statements submitted by former students.

Mail a copy of your goal statement to your instructor. Please keep a copy for yourself because your reaction statement should be based partly on the goal statement.

My Goal Statement for this Package

Please mail a copy of this form to:

Carl B. Smith
150 Smith Research Center
Indiana University
Bloomington, IN 47408-2698

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Examples of Goal Statements

It is my expectation that this learning package will direct me in new directions so that I may improve my instruction in the area of vocabulary. I would like to know when it is best to introduce new vocabulary words. I would also like to gain information about new methods one might use when introducing new vocabulary. I expect to read about some of the newest research related tc vocabulary instruction. It is also expected that tested methods will be described and examined. I would hope that these articles would help me improve how I teach so that my students will benefit and become better readers.

Following the study of this package, I expect to increase my understanding of computer usage in reading development, learn how to integrate computers into reading and writing instruction for learning impaired students, and make decisions on the usefulness of computer games in the classroom.

Following completion of this package I intend to:
1)Identify the components of a formal reading program evaluation.
2)Analyze the characteristics of an effective reading program.
3)Develop evaluation strategies that will improve the monitoring of my program objectives.

Task #2

Reaction Statement

You are asked to type a four-page reaction to this learning package as a way of firming up your sense of what you find interesting, important, or beneficial in this group of materials. You should construct this reaction with your previously established goal statement in mind.

Given below are a number of prompts to indicate the kinds of questions that you might wish to answer in developing this reaction. You may use other questions than those that are here listed. We anticipate that your reaction will be approximately four typewritten, double-spaced pages. Please use the following format in heading your paper.

Reaction

Your Name:_____

Course #:_____

Learning Package:_____

Reaction Prompts

1. Were your goals realized, and how do you know? (Refer to your goal statement.)

2. What important or beneficial ideas did you find in these materials? (Please cite the articles.)

3. Are there trends or concerns in the materials that bother you? Are there those that you agree with? Discuss. (Please use the annotated bibliography and cite ideas from it.)

4. What ideas did you want to try in your daily work world? Describe how you could apply these ideas?

Application Project

If you decide to use this topic for one of your two application projects, you may want to spend more time thinking about ways that you could explore one or more of these ideas in your work.

When you have finished your statement, please mail it to:

Carl B. Smith
150 Smith Research Center
Indiana University
Bloomington, IN 47408-2698

Task #3

Application Project

As you select your two application projects, use the following guidelines:

1. **Formulate a question** that you would like to answer regarding this topic. (For example, can my slow readers use some of the self-monitoring strategies discussed in these materials?) A question often helps to clarify the kinds of information that you will collect or the kinds of evidence that you will use to convince a reader that you are pursuing an interesting question.

2. **Describe with as much detail** as is needed for a reader to understand what you did, what materials you used, what major procedures you used, what evidence you were looking for, in order to answer your question.

3. **Gather evidence** from your students or from teachers to show samples of the kinds of work or the kinds of interactions that were taking place. These samples may be your written observations, sample student papers, photographs, activity sheets, book titles, statistical data, or any other kind of evidence that demonstrates the reality of your inquiry.

4. **Write a summary** of your plan and of your conclusions. The summary should be coherent and clear so a person who was not on site can understand what you attempted and can appreciate the conclusions that you drew.

5. **Send a report** that includes a summary of your plan, sample evidence of what you found, a brief analysis of the evidence, and the conclusions that you

6. **Provide a cover page** that gives your name, address, course number, topic of learning package, and topic of your project. We will mail you a critique of your work. Send your report to:

   Carl B. Smith
   150 Smith Research Center
   Indiana University
   Bloomington, IN 47408-2698

Course Number_____ **Date**_____

Package Title_____

Statements	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
1. This package will help me do my job better.					
2. The pace of the package was too fast.					
3. The package's directions were confusing.					
4. It was easy to follow the directions given in the package.					
5. The package was too easy.					
6. The package was too long.					
7. The package should include more articles and documents to read.					
8. I didn't know the meaning of many words used in the package.					
9. The lecture explicated the topic of the package.					
10. The package's objectives were clear from the start.					
11. The package's teaching points were clear.					

What did you like best about the package?

What did you like least about the package?

How would you improve the package?

Please list other topics you would be interested in studying through our program.

Name (optional)_____

Position_____

Years Taught_____

Please mail a copy of this form to:

Carl B. Smith
150 Smith Research Center
Indiana University
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ERIC/RCS

Selected Abstracts from the ERIC Database

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Sample ERIC Abstract

AN ED289160
AU Binkley,-Marilyn-R.; And-Others
TI Becoming a Nation of Readers: What Parents Can Do.
CS Heath (D.C.) and Co., Lexington, Mass.; Office of Educational Research and Improvement (ED), Washington, DC.
PY 1988
AV What Parents Can Do, Consumer Information Center, Pueblo, CO 81009 ($.50).
NT 40 p.; For Becoming a Nation of Readers: The Report of the Commission on Reading, see ED 253 865.
PR EDRS Price - MF01/PC02 Plus Postage.
DE Beginning-Reading; Literacy-Education; Parent-Attitudes; Parent-Child-Relationship; Preschool-Children; Primary-Education; Reading-Aloud-to-Others; Reading-Attitudes; Recreational-Reading; Written-Language
DE *Literacy-; *Parent-Influence; *Parent-Participation; *Reading-Instruction; *Reading-Processes
ID Reading-Motivation
AB Intended for parents and based on the premise that parents are their children's first and most important teachers, this booklet is a distillation of findings from the 1984 report of the Commission on Reading, "Becoming a Nation of Readers." The introduction reiterates the Commission's conclusions (1) that a parent is a child's first tutor in unraveling the puzzle of written language; (2) that parents should read to preschool children and informally teach them about reading and writing; and (3) that parents should support school-aged children's continued growth as readers. Chapter 1 defines reading as the process of constructing meaning from written texts, a complex skill requiring the coordination of a number of interrelated sources of information. Chapter 2, on the preschool years, focuses on talking to the young child, reading aloud to the preschooler, and teaching children about written language. The third chapter, on beginning reading, counsels parents on what to look for in good beginning reading programs in schools, and how to help the child with reading at home. The fourth chapter, on developing readers and making reading an integral part of learning, offers suggestions for helping the child succeed in school and for encouraging reading for fun. The afterword calls on teachers, publishers, and school personnel, as well as parents, to participate actively in creating a literate society. The booklet concludes with a list of organizations that provide practical help or publications for parents.

Interpretation of ERIC Abstract Field Identifiers

AN ERIC accession number (Use this number when ordering microfiche and paper copies.)
AU Author(s)
TI Title
CS Corporate source
PY Actual or approximate publication date
AV Source and price (availability)
NT Pagination and additional information (such as legibility or related documents)
PR Indicates availability of document from the ERIC Document Reproduction Service
DE Descriptors-indexing terms from the *Thesaurus of ERIC Descriptors* which indicate important concepts in the document
ID Identifiers-indexing terms not included in the *Thesaurus of ERIC Descriptors*
AB Summary

AN: EJ331186
AU: Baumann,-James-F.; Schmitt,-Maribeth-Cassidy
TI: The What, Why, How, and When of Comprehension Instruction.
PY: 1986
JN: Reading-Teacher; v39 n7 p640-46 Mar 1986
AV: UMI
DE: Reading-Materials; Reading-Research; Teacher-Role; Teaching-Methods; Theory-Practice-Relationship
DE: *Cognitive-Processes; *Reading-Comprehension; *Reading-Instruction; *Reading-Skills; *Reading-Strategies
AB: Presents a direct instruction approach to reading comprehension that stresses the use of three forms of knowledge--declarative, procedural, and conditional. Offers a sample lesson demonstrating the application of this approach for teaching a comprehension skill, and concludes with a discussion of how comprehension skill instruction in commercial materials might be adapted or modified to include the knowledge forms. (FL)

AN: ED263534
AU: Best,-Patricia-A.; Brozo,-William-G.
TI: Current Research on Studying: A Qualitative Analysis. College Reading and Learning Assistance Technical Report 85-09.
CS: Georgia State Univ., Atlanta. Div. of Developmental Studies.
PY: 1985
NT: 22 p.; Appendix contains small, light type.
PR: EDRS Price - MF01/PC01 Plus Postage.
DE: Higher-Education; Literature-Reviews; Notetaking-; Reading-Processes; Research-Methodology; Secondary-Education
DE: *Learning-Strategies; *Reading-Comprehension; *Reading-Research; *Study-Habits; *Study-Skills
AB: Because of the limitations of two recent major reviews of the research on studying another review of the literature was conducted. Articles chosen for this review supplied adequate information about levels of processing and encoding specificity, investigated the effects of student-generated as opposed to teacher-provided study aids on comprehension of text, utilized secondary and postsecondary level subjects, and included studies conducted since 1979 not included in the earlier reviews. A total of 16 articles found to be amenable to the analysis were grouped into categories according to the study technique investigated. The analysis revealed that most study techniques were effective when the following conditions were met: (1) the deeper the student is involved in processing textual material, the higher the payoffs in comprehension and retention; (2) the greater the degree of consistency between the processing demands of the study technique and those of the criterion task, the better the results in comprehension and retention; (3) providing adequate training in the use of the technique is critical; and (4) the more time students are engaged in processing text, the better their comprehension. (Summary tables of the research on studying are

appended.) (HOD)

AN: EJ378745
AU: Bloom,-Benjamin
TI: Response to Slavin: Toward a Greater Variety.
PY: 1988
JN: Educational-Leadership; v46 n2 p28 Oct 1988
AV: UMI
DE: Elementary-Education
DE: *Family-Environment; *Learning-Strategies; *Reading-Skills; *Teaching-Methods
AB: Responds to Robert Slavin's unfavorable evaluation of mastery learning by advocating a wide variety of learning methods and strategies. Mentions a recent paper discussing the need for mastery learning improvements, initial prerequisites, a supportive home environment, reading automaticity, and teaching higher mental processes. (MLH)

AN: EJ377045
AU: Crisuolo,-Nicholas-P.
TI: Teach Your Child to Read 'Between the Lines'.
PY: 1988
JN: PTA-Today; v13 n7 p18-19 May 1988
AV: UMI
DE: Intermediate-Grades; Learning-Activities
DE: *Critical-Reading; *Parent-Role; *Reading-Skills; *Reading-Strategies; *Skill-Development
AB: Eight ways parents may help develop and sharpen their children's reading skills, especially those that are critical, are described. (JL)

AN: EJ329511
AU: Davey,-Beth
TI: Using Textbook Activity Guides to Help Students Learn from Textbooks.
PY: 1986
JN: Journal-of-Reading; v29 n6 p489-94 Mar 1986
AV: UMI
DE: Educational-Objectives; Elementary-Secondary-Education; Peer-Teaching; Reading-Strategies; Teaching-Methods
DE: *Content-Area-Reading; *Learning-Strategies; *Reading-Comprehension; *Study-Guides; *Study-Skills
AB: Describes how textbook activity guides that emphasize active student involvement through cooperative learning and a self monitoring component can help students become active, flexible, more effective readers of textbook materials. (HOD)

AN: EJ317406
AU: Dawson,-Andrea
TI: Pre-Reading Skills and Environmental Awareness.
PY: 1984
JN: Bulletin-of-Environmental-Education; n163 p18-19 Dec 1984
DE: Elementary-Education
DE: *Environmental-Education; *Reading-Instruction;
*Reading-Skills; *Reading-Strategies; *Teaching-Methods
AB: Provides examples to show how various pre-reading skills can be taught using the student's familiar environment. These skills include form perception, motor control, visual copying, visual recall, completion and closure, visual rhythm, visual sequencing, temporal sequencing, and visual/auditory discrimination. (JN)

AN: EJ345147
AU: Duffy,-Gerald-G.; Roehler,-Laura-R.
TI: Teaching Reading Skills as Strategies.
PY: 1987
JN: Reading-Teacher; v40 n4 p414-18 Jan 1987
AV: UMI
DE: Basal-Reading; Primary-Education;
Theory-Practice-Relationship
DE: *Reading-Instruction; *Reading-Skills; *Reading-Strategies;
*Teaching-Methods
AB: Explains how reading skills prescribed in basal readers can be recast and taught as reading strategies. (FL)

AN: ED272430
AU: Forsythe,-Barbara
TI: A Multidimensional Approach to Teaching Social Studies.
PY: 1986
NT: 32 p.; Advance seminar paper, Kean College.
PR: EDRS Price - MF01/PC02 Plus Postage.
DE: Achievement-Gains; Basic-Skills;
Elementary-Secondary-Education; Map-Skills; Notetaking-;
Speed-Reading; Student-Improvement
DE: *Content-Area-Reading; *Learning-Strategies;
*Skill-Development; *Social-Studies; *Study-Skills
AB: The purpose of this study was to determine if a multidimensional treatment in the study of the content area of social studies would help the average and below average student. The 37 fifth-grade students in this study came from a middle-socioeconomic level of north central New Jersey. The 18 students in the experimental sample received special instruction in specific study skills. These skills included surveying, questioning, reading, reviewing, reciting (SQ3R), organizing and reading skills, skimming, note taking, and reading charts, maps and diagrams. The other group of 19 students formed the control sample. After a period of nine weeks, the experimental sample showed a significant increase in student achievement in the

content area of social studies as shown on chapter tests given covering the work. Therefore, teachers should develop and use instructional strategies that stress organizational and reading skills in content area courses. (Twenty-two references and three appendices comparing the results of the experimental and control samples are included.) (Author/AG)

AN: EJ335342
AU: Gildemeister,-Joan; Friedman,-Philip
TI: Sequence Memory and Organization in Recall of Black Third and Fifth Graders.
PY: 1986
JN: Journal-of-Negro-Education; v55 n2 p142-54 Spr 1986
AV: UMI
DE: Cognitive-Structures; Elementary-Education; Reading-Instruction; Urban-Youth
DE: *Black-Students; *Cognitive-Development; *Decoding-Reading; *Reading-Improvement; *Reading-Skills; *Reading-Strategies
AB: Assesses the influence of grade and reading competence on inner-city Black children's sequence memory and use of organization in recall. Suggests that primary teachers should shift from literal decoding practice to providing semantic organizers and emphasizing interrelationships between words. The development of such basic cognitive skills increases in importance as the child progresses through school. (KH)

AN: EJ367419
AU: Gleason,-Mary-M.; And-Others
TI: Study Skills.
PY: 1988
JN: Teaching-Exceptional-Children; v20 n3 p52-57 Spr 1988
AV: UMI
DE: Assignments-; Secondary-Education; Study-Skills
DE: *Learning-Strategies; *Listening-Skills; *Mild-Disabilities; *Reading-Comprehension; *Teaching-Methods; *Writing-Skills
AB: Study strategies used to assist mildly handicapped students become more actively engaged and successful in gaining and responding to information in content area classes are described. They include using advance organizers, summarizing/paraphrasing what is read, enhancing listening skills, and improving the organization, appearance, and accuracy of written work. (VW)

AN: ED245198
AU: Graham,-Kenneth-G.; Robinson,-H.-Alan
TI: Study Skills Handbook: A Guide for All Teachers.
CS: ERIC Clearinghouse on Reading and Communication Skills, Urbana, Ill.; International Reading Association, Newark, Del.
PY: 1984
AV: International Reading Association, 800 Barksdale Rd., Box

8139, Newark, DE 19714 (No. 858, $5.50 members, $8.00 non-members).
NT: 137 p.; Small print on several pages may not reproduce well.
PR: EDRS Price - MF01/PC06 Plus Postage.
DE: Educational-Theories; Elementary-Secondary-Education; Metacognition-; Reading-Comprehension; Reading-Processes; Retention-Psychology; Study-Guides; Study-Habits; Teacher-Role
DE: *Learning-Strategies; *Reading-Instruction; *Reading-Strategies; *Skill-Development; *Study-Skills
AB: Intended for elementary and secondary school teachers, this handbook provides practical instruction for the development of students' study strategies. Each of the four chapters begins with a study guide and closes with a reaction guide, thus illustrating for the reader an excellent study strategy that teachers may use with text materials in their classes. The first chapter discusses the nature of readers, reading processes, and specific study skills. The remaining three chapters discuss study strategies useful before, during, and after reading. (HTH)

AN: EJ368667
AU: Konopak,-Bonnie-C.; Williams,-Nancy-L.
TI: Using the Keyword Method to Help Young Readers Learn Content Material.
PY: 1988
JN: Reading-Teacher; v41 n7 p682-87 Mar 1988
AV: UMI
DE: Elementary-Education; Instructional-Improvement; Learning-Processes; Mnemonics-; Teaching-Methods; Vocabulary-Skills
DE: *Language-Acquisition; *Learning-Strategies; *Memory-; *Reading-Skills; *Visualization-
AB: Noting the use of mental pictures to aid students' learning--the keyword method--is effective for both good and poor readers, describes specific methods, provides research to support their use, and presents classroom applications that lead from teacher instruction to students' independent learning. (NH)

AN: ED263546
AU: Malena,-Richard-F.; Atwood,-Karen
TI: Students and Studying: An Integrated Approach.
PY: 1985
NT: 16 p.; Paper presented at the Annual Meeting of the Southwest Regional Conference of the International Reading Association (13th, Albuquerque, NM, January 24-26, 1985).
PR: EDRS Price - MF01/PC01 Plus Postage.
DE: Cognitive-Development; Higher-Education; Learning-Strategies; Models-; Reading-Skills; Secondary-Education
DE: *Content-Area-Reading; *Metacognition-; *Reading-Strategies; *Study-Skills; *Teacher-Role; *Teaching-Methods
AB: Students must be shown not only how to use study strategies,

must also why the strategy should be undertaken and what it is expected to achieve. The how-to-do-it step is not sufficient for all students to grasp study strategies. The teaching of these strategies must be direct, deliberate, and systematic. The metacognitive skill (why) must accompany the direct teaching of the cognitive skills to ensure student purpose and utilization. To be effective, teaching should follow a pattern that emphasizes modeling, guided practice, application, and feedback. A study strategy that includes both the reading and the study skills necessary for content area work is the PREP study system. The "P" refers to the preview step, in which the teacher draws students' prior knowledge to the fore by examining the title, subtitles, introductions, summaries, and graphic aids in the content text before reading actually begins. The next step, active reading ('R"), involves finding the answers to the questions posed in the "P" stage, using such aids as margin noting and highlighting. This is followed by "E", examining, or showing students how to use notes or maps. Finally, the "P" or prompt, involves the use of multisensory learning (oral recitation, acronyms, and mnemonic devices) to transfer the overt strategy to a personalized covert strategy. (Activities to reinforce students' notetaking are appended.) (HOD)

AN: EJ315101
AU: Manzo,-Anthony-V.
TI: Expansion Modules for the ReQuest, CAT, GRP, and REAP Reading/Study Procedures.
PY: 1985
JN: Journal-of-Reading; v28 n6 p498-503 Mar 1985
AV: UMI
DE: Models-; Reading-Games; Reading-Skills; Secondary-Education; Self-Evaluation-Individuals
DE: *Independent-Study; *Metacognition-; *Reading-Instruction; *Reading-Strategies; *Study-Skills; *Teaching-Methods
AB: Shares some of the improvements made on four study/learning procedures. (HOD)

AN: EJ306053
AU: McDaniel,-Mark-A.; Pressley,-Michael
TI: Putting the Keyword Method in Context.
PY: 1984
JN: Journal-of-Educational-Psychology; v76 n4 p598-609 Aug 1984
AV: UMI
NT: Pressley's participation was supported by a grant from the National Sciences and Engineering Research Council of Canada.
DE: Associative-Learning; Cognitive-Processes; Discovery-Learning; Higher-Education; Recall-Psychology; Verbal-Ability
DE: *Context-Clues; *Learning-Strategies; *Vocabulary-Skills
AB: The keyword method was compared to the context method of

learning new vocabulary in two experiments with undergraduate subjects. In both experiments the keyword method produced significantly greater definition recall. Implications for vocabulary learning theories in particular, and discovery learning approaches in general, are discussed. (Author/BS)

AN: EJ371813
AU: Muth,-K.-Denise
TI: Research and Practice: Comprehension Monitoring: A Reading-Mathematics Connection.
PY: 1988
JN: Reading-Research-and-Instruction; v27 n3 p60-67 Spr 1988
AV: UMI
DE: Intermediate-Grades; Mathematics-Skills; Problem-Solving; Reading-Research
DE: *Content-Area-Reading; *Reading-Skills; *Reading-Strategies
AB: Suggests a way of helping students apply their reading skills to solve math word problems. Claims comprehension monitoring is a set of skills that can be applied to both reading and math problem solving to help students integrate their reading skills with their computational skills. (MS)

AN: ED278972
AU: Osborn,-Jean
TI: Reading Strategies and Reading Generalizations. Reading Education Report No. 69.
CS: Bolt, Beranek and Newman, Inc., Cambridge, Mass.; Illinois Univ., Urbana. Center for the Study of Reading.
PY: 1986
NT: 15 p.
PR: EDRS Price - MF01/PC01 Plus Postage.
DE: Classroom-Techniques; Elementary-Education; Reading-Comprehension; Reading-Processes; Teaching-Methods; Teaching-Models
DE: *Reading-Improvement; *Reading-Research; *Reading-Skills; *Reading-Strategies
AB: In its report "Becoming a Nation of Readers," the Commission on Reading defines reading as the process of constructing meaning from written texts, a view of reading that makes the use of strategies seem probable. If a book is a source of partial information, and readers are supposed to use knowledge they already possess to determine the meaning of what they are reading, then good readers must do "something" to put it all together. The Commission believes the past decade's research indicates that reading is a constructive process, it is fluent and strategic, it requires motivation, and it is a continuously developing skill. Some direct instruction activities such as modeling a strategy by thinking aloud, or maintaining a dialogue between teacher and students are now being studied by researchers, with noticeable improvements in students' use of

reading strategies for reading, studying, writing, and learning. Teachers should think of such skills and strategies as the "mental process" that good readers use when they encounter problems in reading, and therefore think of teaching as the explanations they can provide about a given skill or strategy, its value, and "the secret" of using it successfully. (NKA)

AN: EJ[illegible]
AU: Otto,-Wayne
TI: Research: A Love Story.
PY: 1987
JN: Journal-of-Reading; v30 n7 p668-71 Apr 1987
AV: UMI
NT: Thematic issue: Making Readers Independent.
DE: Cognitive-Style; Interpersonal-Communication; Reading-Comprehension; Secondary-Education
DE: *Learning-Theories; *Reading-Instruction; *Reading-Processes; *Reading-Skills; *Reading-Strategies
AB: Advocates (in a humorous style) the teaching of specific reading skills. (NKA)

AN: ED276988
AU: Pittelman,-Susan-D.; Johnson,-Dale-D.
TI: Project on the Investigation of the Effectiveness of Vocabulary Instruction. Final Report.
CS: Wisconsin Center for Education Research, Madison.
PY: 1985
NT: 17 p.
PR: EDRS Price - MF01/PC01 Plus Postage.
DE: Basal-Reading; Classroom-Techniques; Elementary-Education; Reading-Skills; Semantics-; Sight-Method; Word-Lists; Word-Recognition
DE: *Reading-Instruction; *Reading-Strategies; *Vocabulary-Development; *Vocabulary-Skills
AB: The primary focuse of the research project reported in this paper over a five-year period has been on investigating the effectiveness of vocabulary teaching strategies, with particular emphasis on the two semantic-based instructional strategies of semantic mapping and semantic feature analysis. A series of five varied studies evaluated these strategies for vocabulary acquisition. All verified that these strategies are not only powerful tools for vocabulary development but good alternatives to the traditional instructional activities presented before students read a new passage (pre-reading). In this latter application, semantic mapping and feature analysis serve not only to introduce key vocabulary from a passage but also to activate students' prior knowledge of a topic, thereby better preparing students to understand, assimilate, and evaluate the information in the material to be read. In addition, when used after reading a new passage (postreading), semantic based instructional

strategies provide a review of the material that anchors new knowledge to prior knowledge. In a secondary focus of the research project to determine the role of vocabulary instruction in actual classroom practice, a field survey of teachers was conducted. Results indicate that vocabulary instruction and emphasis are not high priorities with most classroom teachers. (NKA)

AN: EJ293077
AU: Richgels,-Donald-J.; Hansen,-Ruth
TI: Gloss: Helping Students Apply Both Skills and Strategies in Reading Content Texts.
PY: 1984
JN: Journal-of-Reading; v27 n4 p312-17 Jan 1984
AV: UMI
DE: Content-Area-Reading; Schemata-Cognition; Secondary-Education; Teaching-Methods
DE: *Reading-Comprehension; *Reading-Instruction; *Reading-Skills; *Reading-Strategies
AB: Gives teachers guidelines for preparing gloss notations focused to help readers develop specific reading skills and strategies. (AEA)

AN: EJ343641
AU: Rinehart,-Steven-D.; And-Others
TI: Some Effects of Summarization Training on Reading and Studying.
PY: 1986
JN: Reading-Research-Quarterly; v21 n4 p422-38 Fall 1986
AV: UMI
DE: Elementary-Education; Grade-6; Intermediate-Grades; Reading-Improvement; Recall-Psychology
DE: *Instructional-Effectiveness; *Reading-Comprehension; *Reading-Instruction; *Reading-Research; *Reading-Strategies; *Study-Skills
AB: Reports a study indicating that summarization training of sixth-grade students improved recall of major but not minor information on a studying task and that such training is an effective tool for improving reading and studying skills. Includes ways to improve summarization instruction for children of this age group. (HTH)

AN: ED297270
AU: Robinson,-H.-Alan
TI: Whole Language and Whole Language Instruction: A Definition.
PY: 1988
NT: 17 p.; Paper presented at the Annual Meeting of the Nassau Reading Council (Long Island, NY, April 16, 1988) and a shorter version presented at the Annual Meeting of the International

Reading Association (33rd, Toronto, Canada, May 1-6, 1988).
PR: EDRS Price - MF01/PC01 Plus Postage.
DE: Elementary-Education; Reading-Comprehension; Teaching-Models; Test-Wiseness; Thematic-Approach
DE: *Instructional-Design; *Language-Skills; *Reading-Instruction; *Reading-Strategies
AB: What whole language is and is not, what whole language instruction is and is not, and whether "subskills" can be integrated into a whole language approach are topics worthy of consideration. Whole language is natural language within a given context and in relation to a given situation. Isolated bits of language used for exercise rather than for real communication are not natural language. Language which is not a unit, which does not have a sensible beginning and ending, and which does not serve to communicate within a meaningful context for a given purpose is not whole language. Whole language instruction includes the teaching and learning of skills and/or strategies within a setting in order to accomplish a goal that cements, extends, and expands learning. It is not the planned teaching of skills in a sequence over time. It is frequently coupled with an integrated or thematic approach to learning. This approach is consistent with a whole language approach but is not mandatory. The role of the whole language teacher includes developing strategies for dealing with fragments of language, such as objective and standardized tests. Subskills instruction can be subsumed in a whole language approach to reading instruction if the subskills are recognized as reading purposes and major organizational strategies. Learning and functioning through language is the process as well as the goal of whole language instruction. (RS)

AN: EJ306492
AU: Simpson,-Michele-L.
TI: The Status of Study Strategy Instruction: Implications for Classroom Teachers.
PY: 1984
JN: Journal-of-Reading; v28 n2 p136-43 Nov 1984
AV: UMI
DE: Reading-Research; Secondary-Education; Study-Habits
DE: *Content-Area-Reading; *Learning-Strategies; *Reading-Skills; *Reading-Strategies; *Study-Skills
AB: Offers three explanations for why students lack the strategies for independent learning and follows that with five practical recommendations for improving study strategies. (HOD)

AN: EJ324395
AU: Speidel,-Gisela-E.
TI: Some Implications of Semantic Development for Vocabulary Instruction.
PY: 1985

JN: Educational-Perspectives; v23 n1 p28-35 Spr 1985
AV: UMI
DE: Comprehension-; Elementary-Secondary-Education; Language-Arts; Language-Skills; Word-Study-Skills
DE: *Instructional-Improvement; *Learning-Theories; *Reading-Strategies; *Semantics-; *Vocabulary-Development; *Vocabulary-Skills
AB: Describes some of the current views in semantics and semantic development and discusses the implications for vocabulary instruction. Explains the major theories of word meaning acquisition in children and lists researched variables of word meaning development. Offers examples of instructional strategies for effective vocabulary development. (ML)

AN: ED263536
AU: Stahl,-Norman-A.; And-Others
TI: Developing Independent Learners: Strategies and Tactics for Mastery of Text. College Reading and Learning Assistance Technical Report 85-10.
CS: Georgia State Univ., Atlanta. Div. of Developmental Studies.
PY: 1985
NT: 30 p.
PR: EDRS Price - MF01/PC02 Plus Postage.
DE: Content-Area-Reading; Higher-Education; Reading-Comprehension; Secondary-Education
DE: *Notetaking-; *Questioning-Techniques; *Reading-Improvement; *Reading-Strategies; *Study-Skills; *Teaching-Methods
AB: Intended to make teachers aware of various tactics that will move students toward strategies for independent learning, this paper describes several work-study skills, which--once mastered--can be integrated into the set of tactics the life-long learner might use in his or her independent mastery of text and lecture. The first part of the paper deals with improving textbook study with questioning tactics and presents questioning strategies based on two premises: (1) that questioning strategies can be used to increase students' awareness of the characteristics of expository and narrative text, and (2) that questioning is most helpful when students frame their own questions. The second section presents 14 guidelines for improving study through notetaking tactics, while the third section presents guidelines for using graphic organizers, specifically, various kinds of mapping. The fourth section explores some of the shortcomings inherent to reading strategy training and the need for flexibility, so that each student can assemble individual strategies to suit his or her needs. (HTH)

AN: EJ315181
AU: Stahl,-Norman-A.; Henk,-William-A.
TI: Teaching Students to Use Textbook-Study Systems.
PY: 1985

JN: Reading-Horizons; v25 n3 p153-61 Spr 1985
AV: UMI
DE: Elementary-Secondary-Education; Learning-Processes; Teaching-Methods
DE: *Learning-Strategies; *Reading-Instruction; *Study-Skills; *Textbooks-
AB: Reviews literature on (1) prerequisite skills students should develop prior to learning a textbook-study system, (2) teaching activities undertaken before introducing a system to a class, and (3) recommended procedures for teaching SQ3R. (FL)

AN: EJ342923
AU: Tovey,-Duane-R.; And-Others
TI: Remedying "The 180 Degrees Syndrome" in Reading.
PY: 1986
JN: Childhood-Education; v63 n1 p11-15 Oct 1986
AV: UMI
DE: Elementary-Education; Reading-Programs
DE: *Elementary-School-Students; *Elementary-School-Teachers; *Language-Acquisition; *Reading-Instruction; *Reading-Skills; *Reading-Strategies
AB: Maintains that there is a discrepancy between the ways children acquire language and the ways they have been taught reading skills in school, referred to as "The 180 degrees Syndrome." Attempts to promote more language-conscious reading instruction by describing five examples of the syndrome and suggests remedies to alleviate its symptoms.

AN: ED283139
AU: Weisenbach,-E.-Lynne
TI: Teaching Reading Comprehension: Strategies for Success.
PY: 1987
NT: 11 p.; Paper presented at the Annual Meeting of the Indiana State Council of the International Reading Association (Indianapolis, IN, April 2-4, 1987).
PR: EDRS Price - MF01/PC01 Plus Postage.
DE: Basal-Reading; Childrens-Literature; Cognitive-Development; Elementary-Education; Imagery-; Reading-Processes; Skill-Development; Teaching-Methods
DE: *Reading-Comprehension; *Reading-Improvement; *Reading-Skills; *Reading-Strategies
AB: Numerous comprehension strategies can be used successfully with both children's literature and a basal reading series to help children focus on written text during reading. One of the most important techniques is developing background knowledge prior to reading--the overall purpose of which is to help readers relate their existing schemata to the selection of new schema to help develop concepts. Prediction is another comprehension strategy that may be used effectively by readers. Predicting the results of various actions can easily be incorporated into

diverse reading situations. Emphasis should be on the thought process and not on "right" or "wrong" answers. Instruction in the components of text structure and its use in constructing meaning will aid in reading comprehension, as will discussion of imagery, a metacognitive skill directly related to reading. The ReQuest (Reciprocal Questioning) Technique involves the children and teacher silently reading portions of a text and alternately asking and answering questions related to the material. Besides aiding comprehension monitoring, this technique is enjoyable for students, since it involves a role exchange between teacher and student. Separately or together, these strategies provide an effective approach to the improvement of reading comprehension. (A reference list is appended.) (NKA)

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PLEASE INDICATE METHOD OF PAYMENT AND ENTER REQUIRED INFORMATION.

VISA

WE HONOR BOTH

MasterCard

☐ Check or Money Order ☐ Purchase Order (ATTACH ORIGINAL PURCHASE ORDER)

☐ MasterCard ☐ VISA

Account Number _____ Expiration Date _____

Signature _____

☐ Deposit Account Number _____

Signature _____

ENTER "SHIP TO" ADDRESS _____

_____

_____

CALL TOLL FREE 1-800-443-ERIC (3742) 24 HOURS A DAY - 7 DAYS A WEEK
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